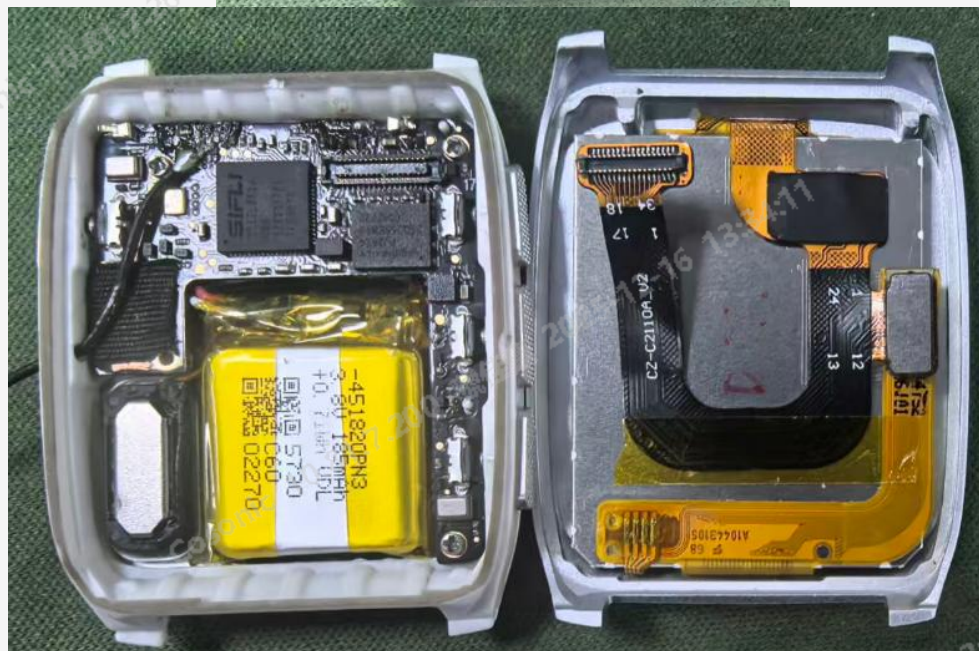


BT Antenna Test Report

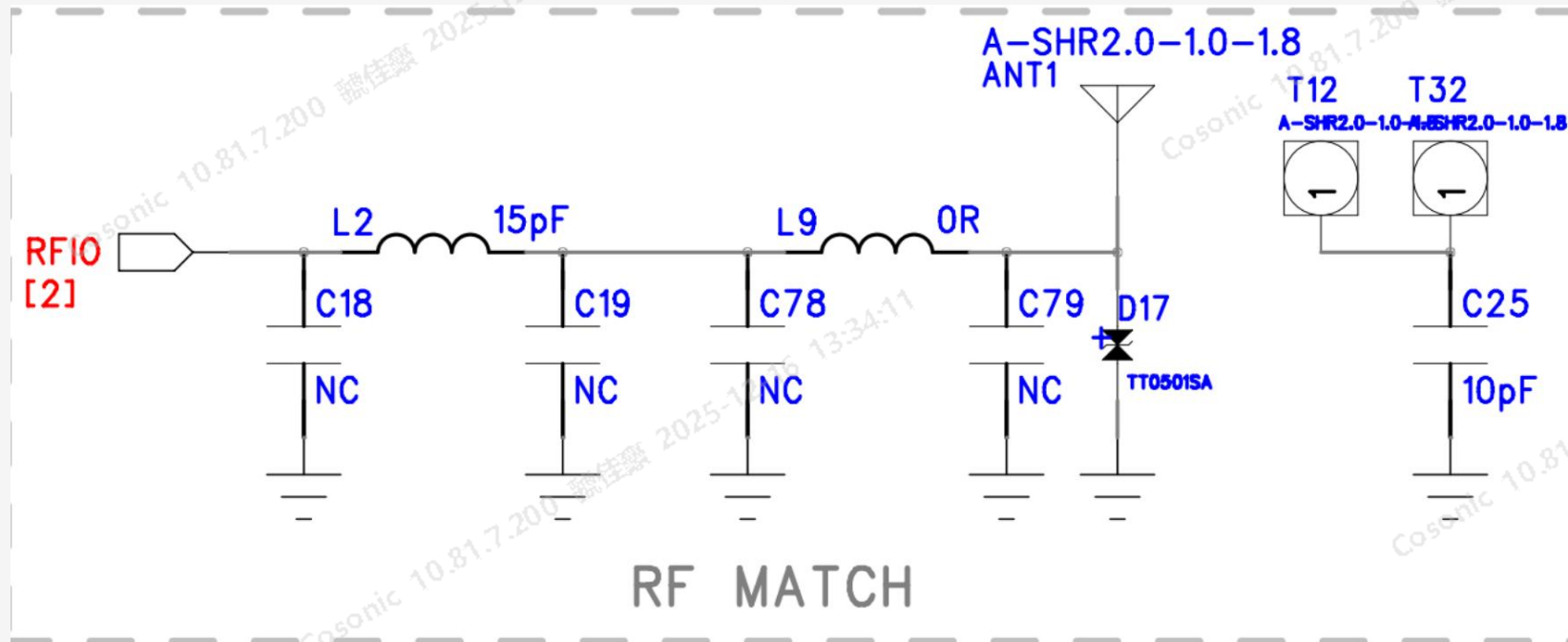
Customer	COSONIC	Project	CI-W062S
Report Version	V3.0	Report Date	2025-11-07
Prepared by	Zhiqiang.Chen	Checked by	Lei.Zhang



Machine image:



Matching circuit:



Matching has been changed as follows:

C18: N/C
L2: 15 PF
C19: N/C

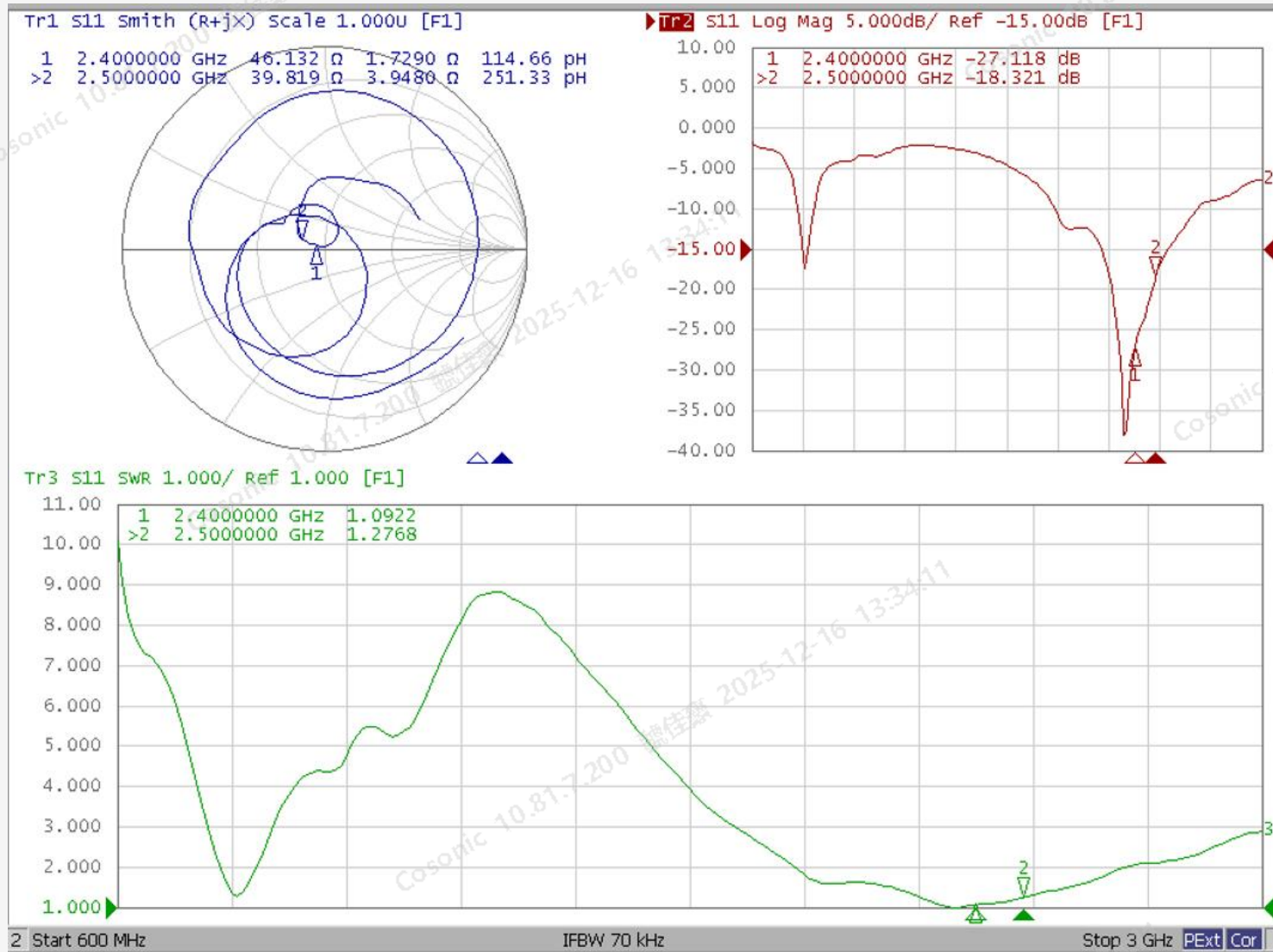
C78: 0.5PF
L9: 1 NH
C79: N/C

C25: 18PF



Antenna test results:

S11 parameter



Passive efficiency of antenna:

Free space state

Frequency(MHz)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
2400	1.52	-6.15	24.28
2410	1.38	-6.14	24.31
2420	1.52	-6.01	25.05
2430	1.72	-5.91	25.67
2440	2.14	-5.79	26.34
2450	2.48	-5.74	26.67
2460	2.85	-5.72	26.78
2470	3.03	-5.74	26.66
2480	3.36	-5.58	27.66
2490	3.51	-5.4	28.86
2500	3.4	-5.31	29.44

Hand model status

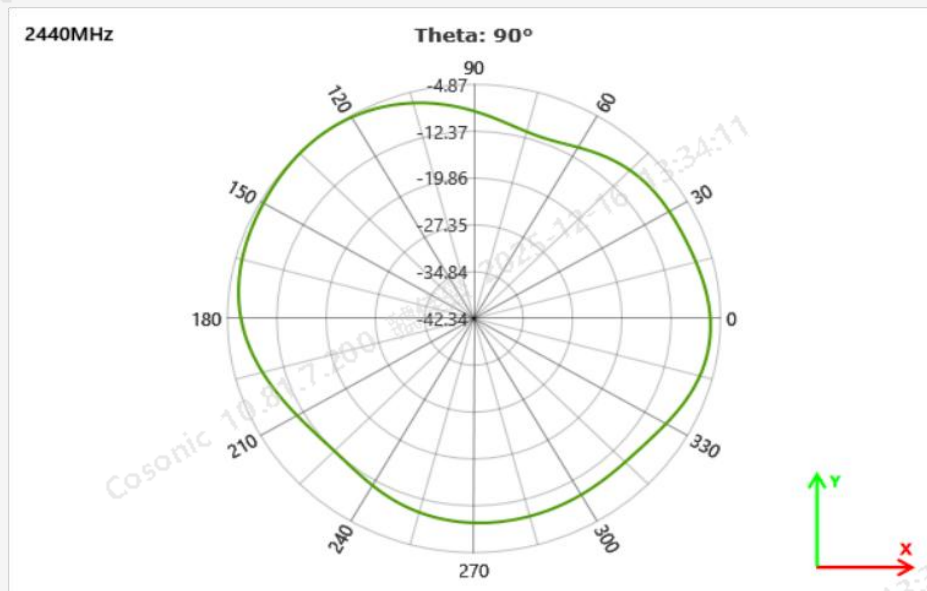
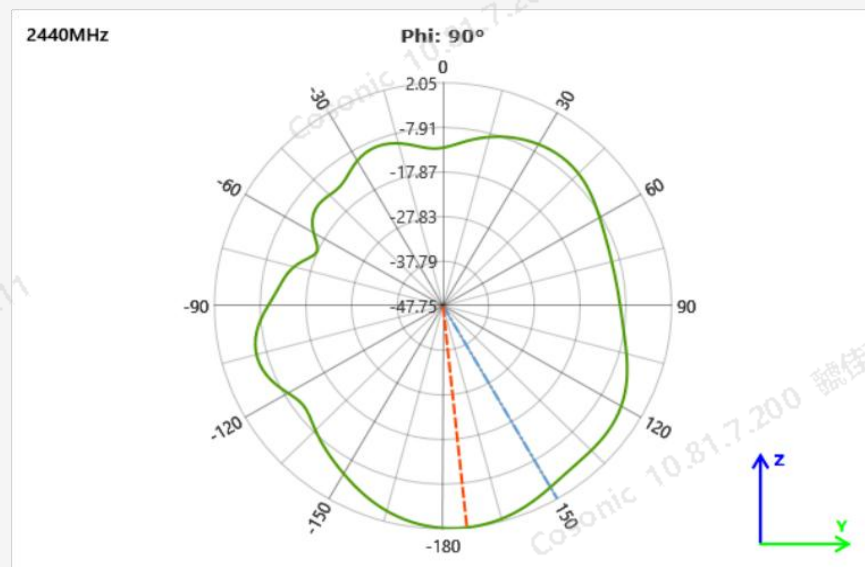
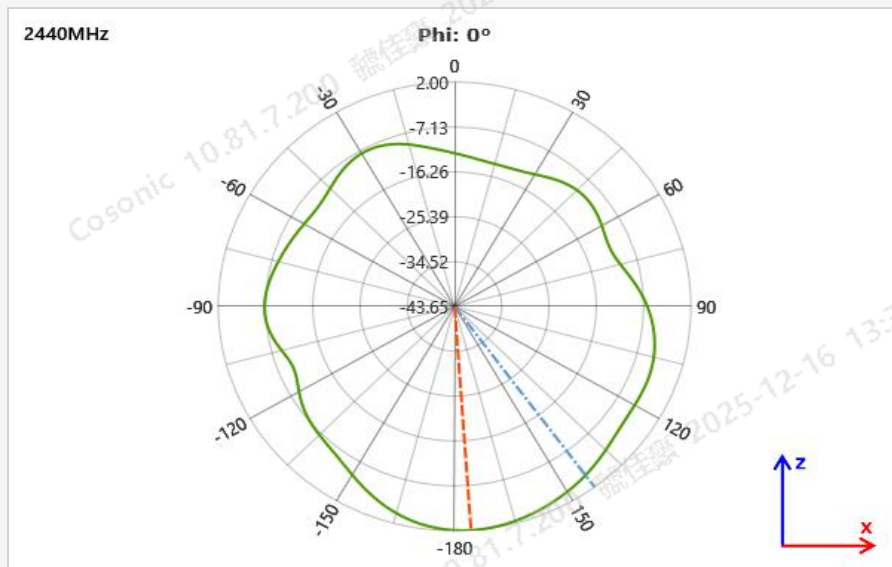
Frequency(MHz)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
2400	-3.88	-10.18	9.6
2410	-4.13	-10.22	9.52
2420	-4.01	-10.21	9.53
2430	-3.97	-10.18	9.6
2440	-3.71	-10.13	9.7
2450	-3.37	-10.08	9.81
2460	-2.94	-10.1	9.78
2470	-2.81	-10.15	9.65
2480	-2.75	-10.06	9.86
2490	-2.71	-9.91	10.21
2500	-2.92	-9.81	10.44



Passive field diagram of antenna:

Free space state

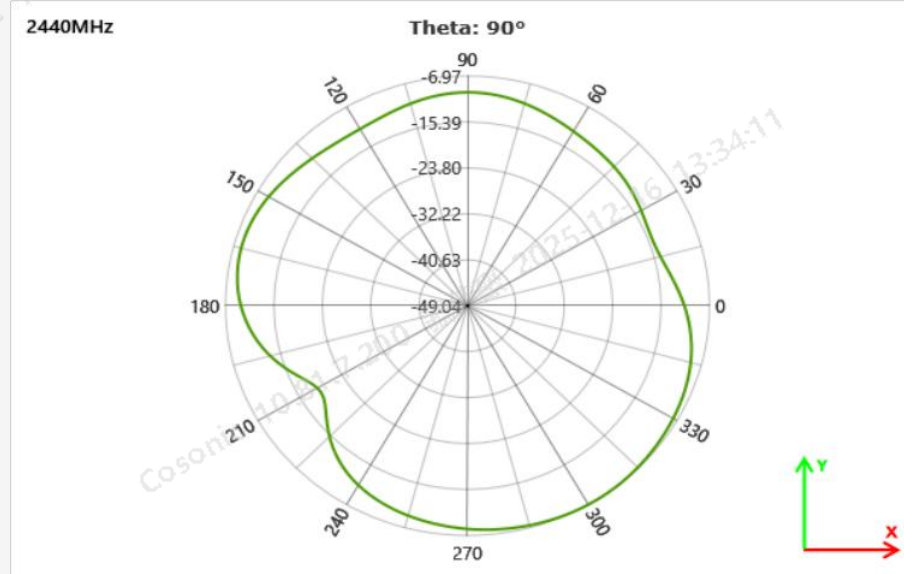
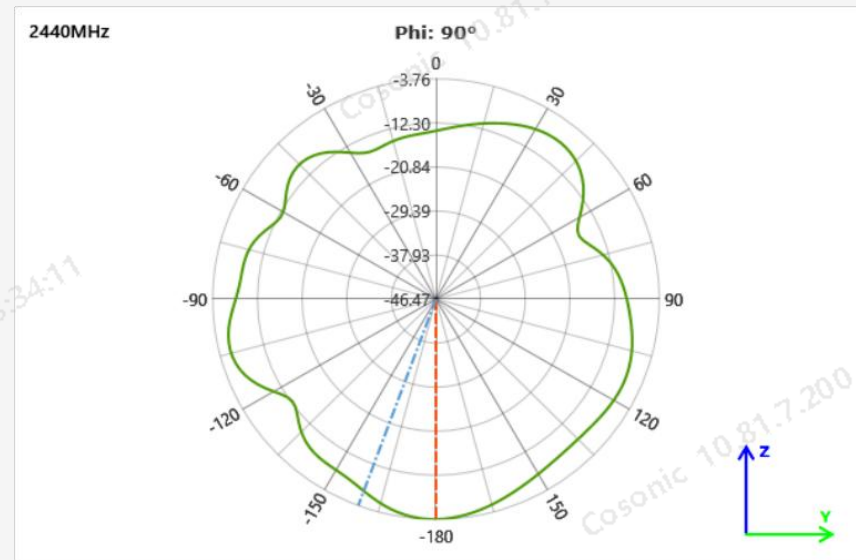
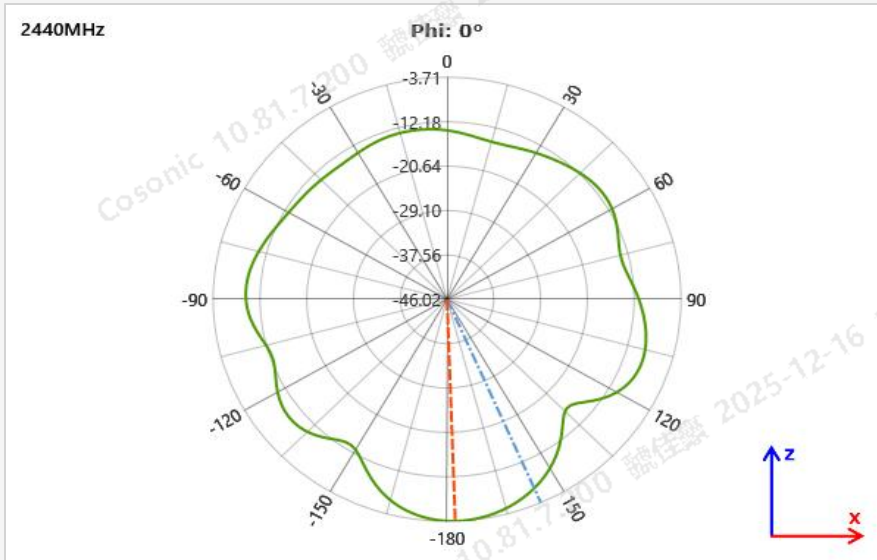
2440MHz



Passive field diagram of antenna:

Hand model status

2440MHz

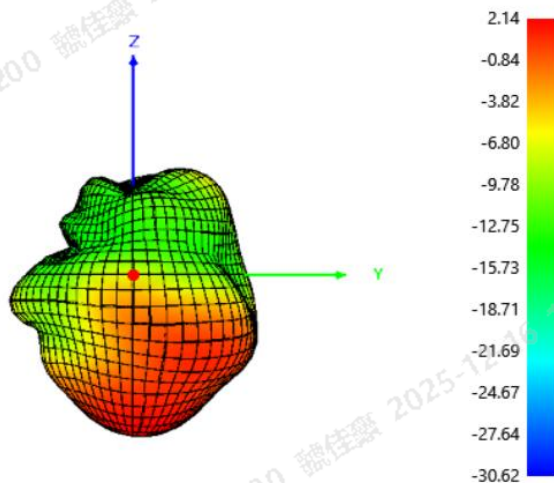


Passive field diagram of antenna:

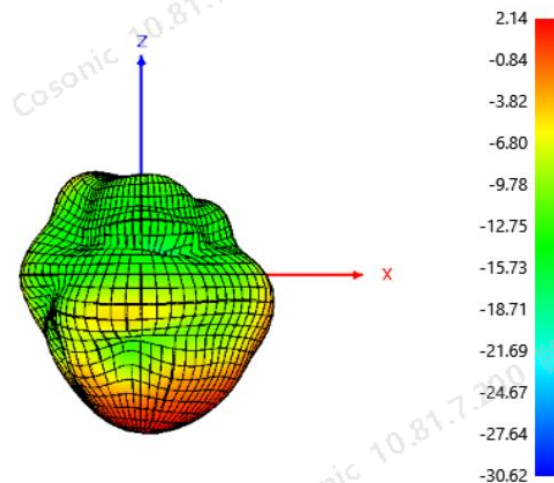
Free space state

2440MHz

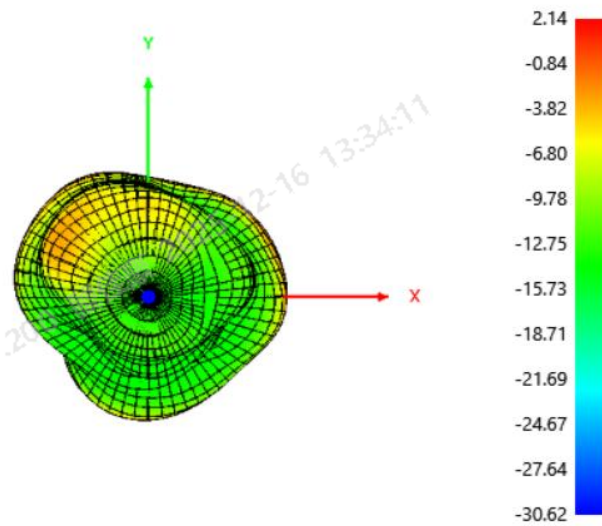
Freq: 2440MHz (XPositive)



Freq: 2440MHz (YNegative)



Freq: 2440MHz (ZPositive)

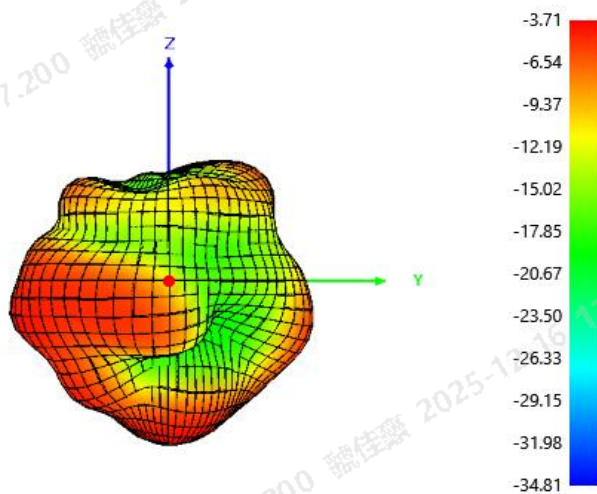


Passive field diagram of antenna:

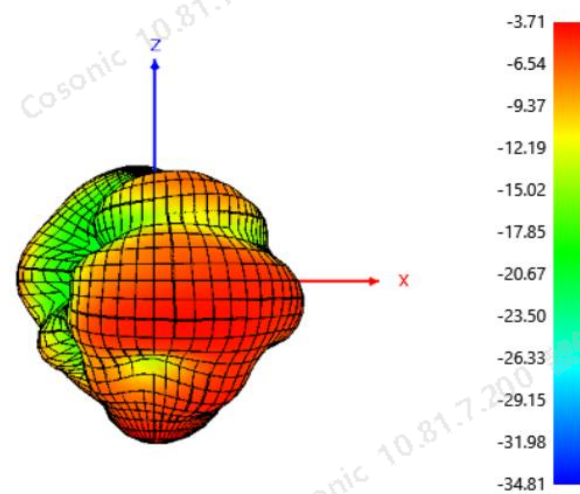
Hand model status

2440MHz

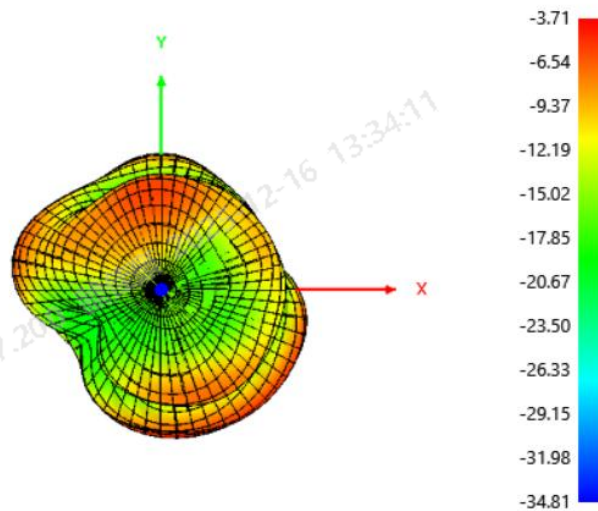
Freq: 2440MHz (XPositive)



Freq: 2440MHz (YNegative)



Freq: 2440MHz (ZPositive)



Black border Antenna test results: OTA active test parameters

Free space state	CH	TRP(dBm)	TIS(dBm)
	0	-0.66	-76.77
	39	-0.41	-77.49
	78	-0.6	-77.54

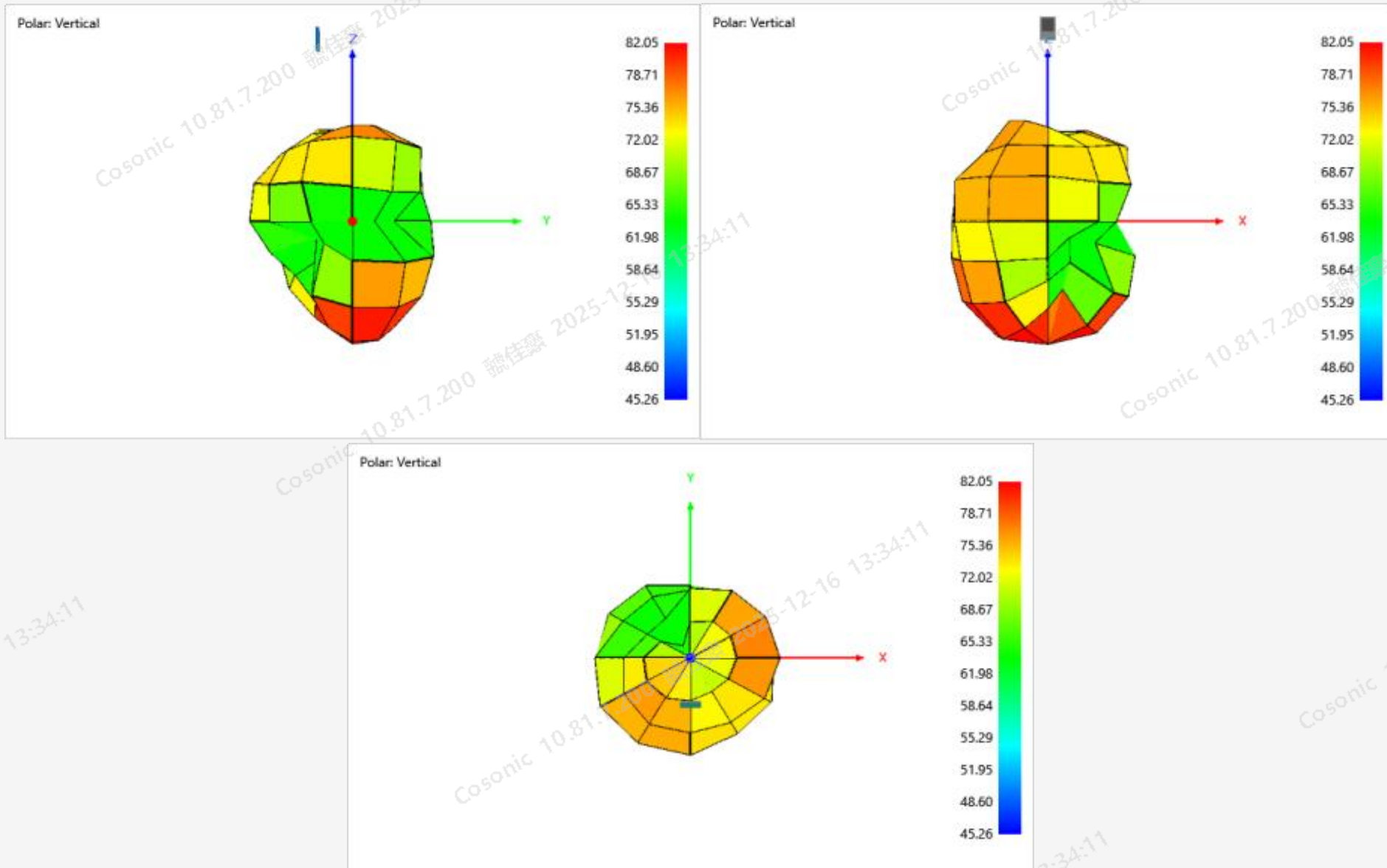
Hand model status	CH	TRP(dBm)	TIS(dBm)
	0	-4.88	-72.26
	39	-4.5	-72.58
	78	-4.21	-73



Active field diagram of antenna:

Free space state

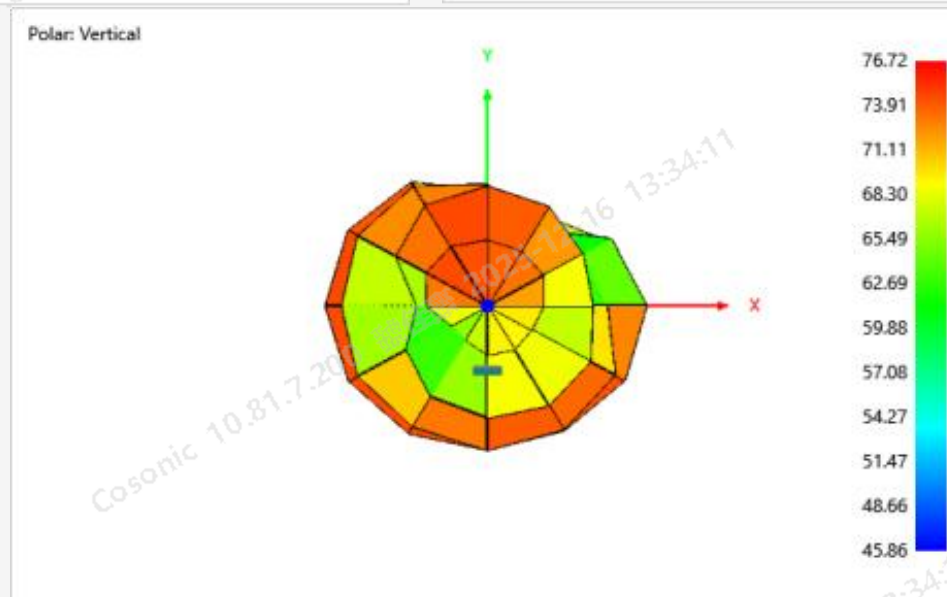
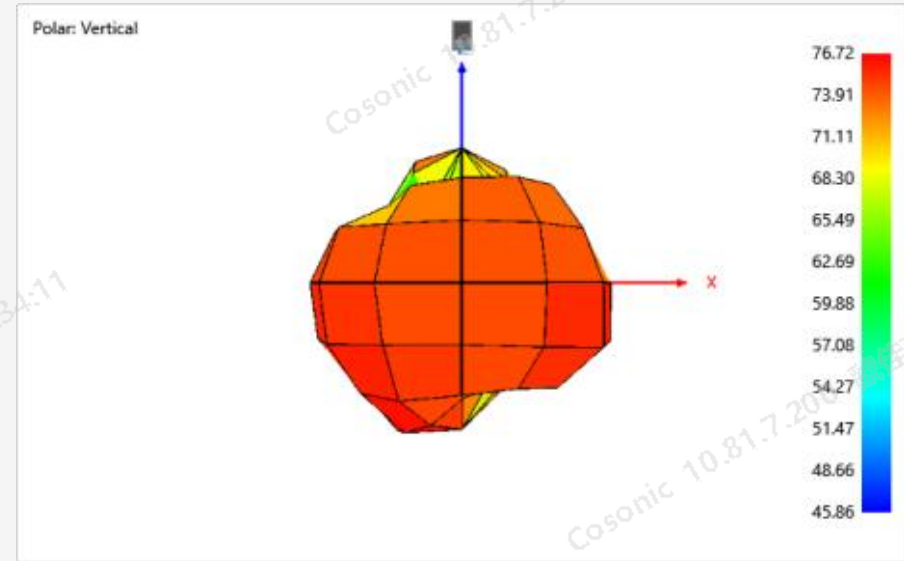
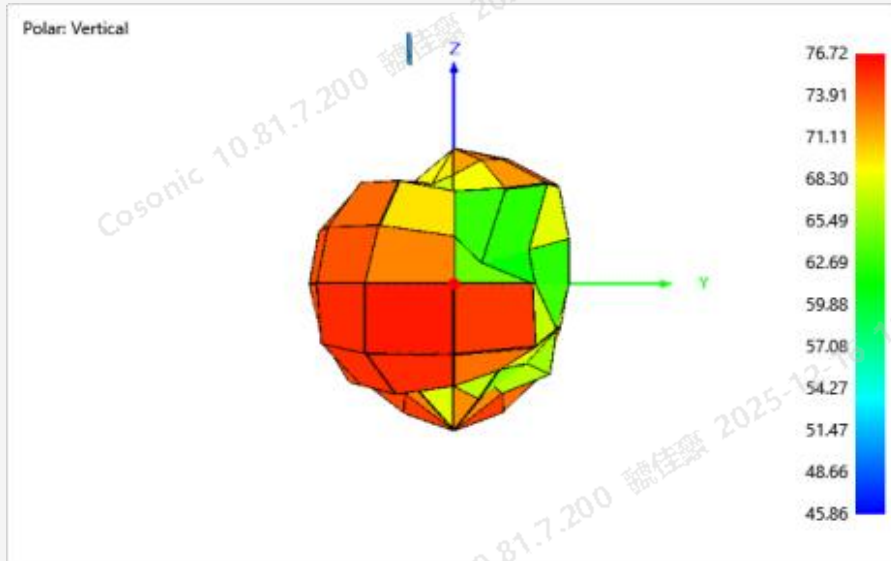
2440MHz



Active field diagram of antenna:

Hand model status

2440MHz



Silver border Antenna test results:

OTA active test parameters

Free space state	CH	TRP(dBm)	TIS(dBm)
	0	-0.32	-76.93
	39	-0.04	-77.75
	78	-0.1	-77.62

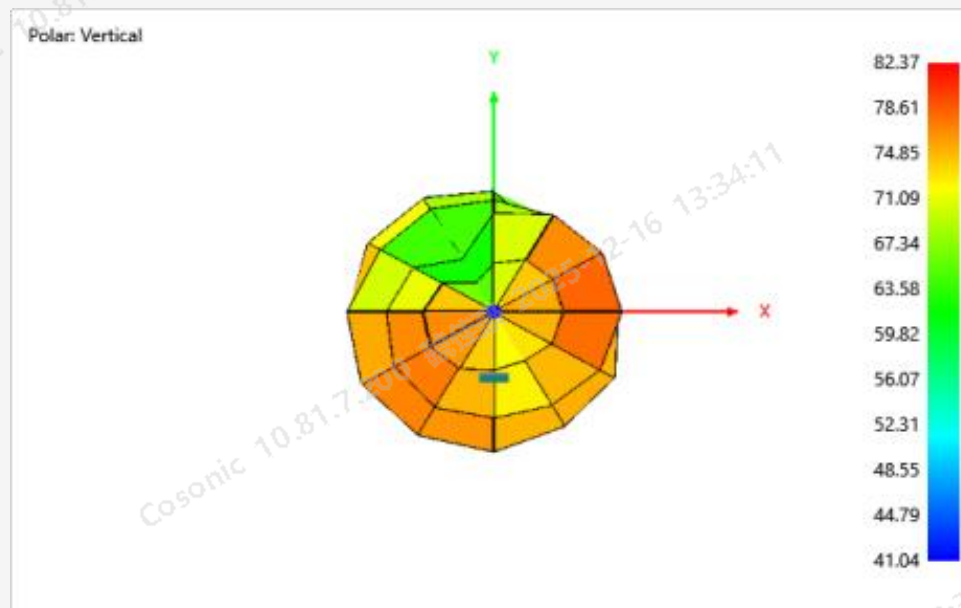
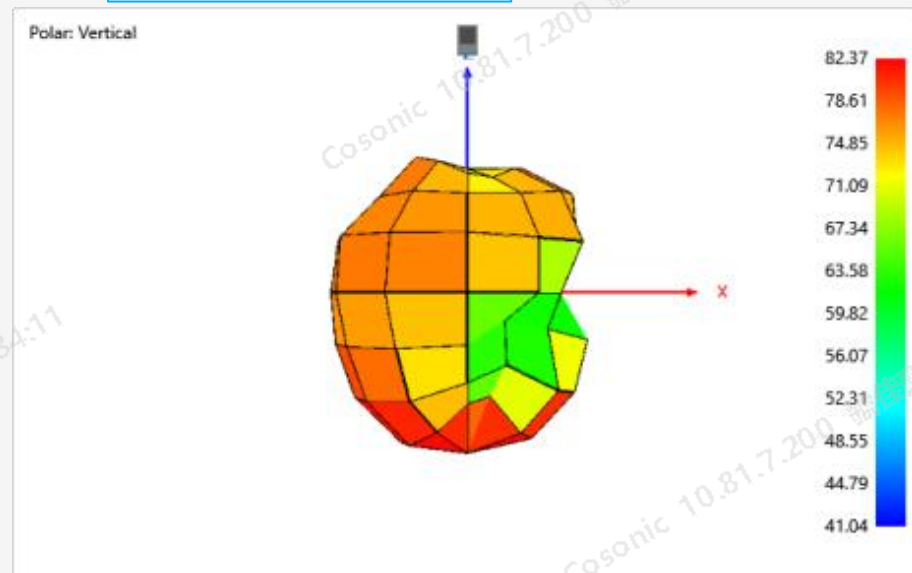
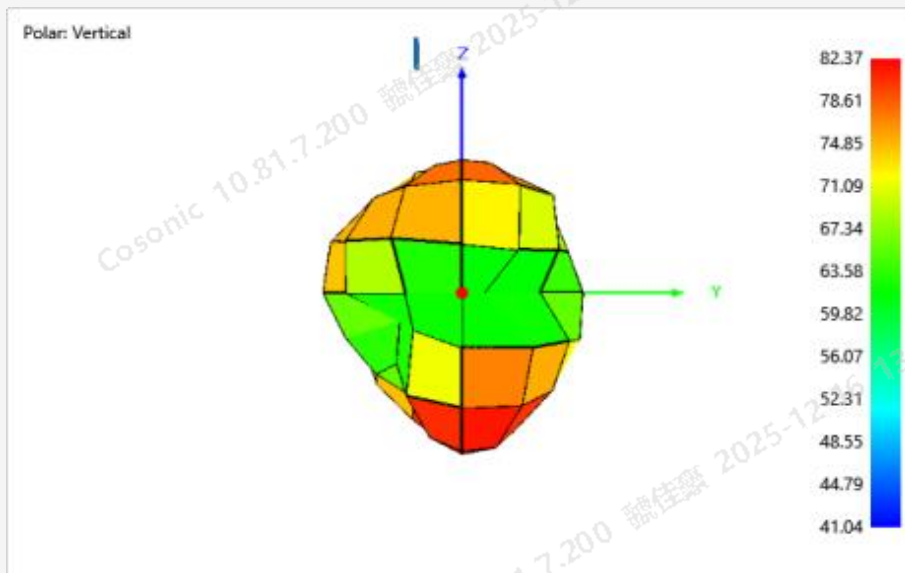
Hand model status	CH	TRP(dBm)	TIS(dBm)
	0	-4.57	-73.92
	39	-4.29	-74.2
	78	-4.11	-74.4



Active field diagram of antenna:

Free space state

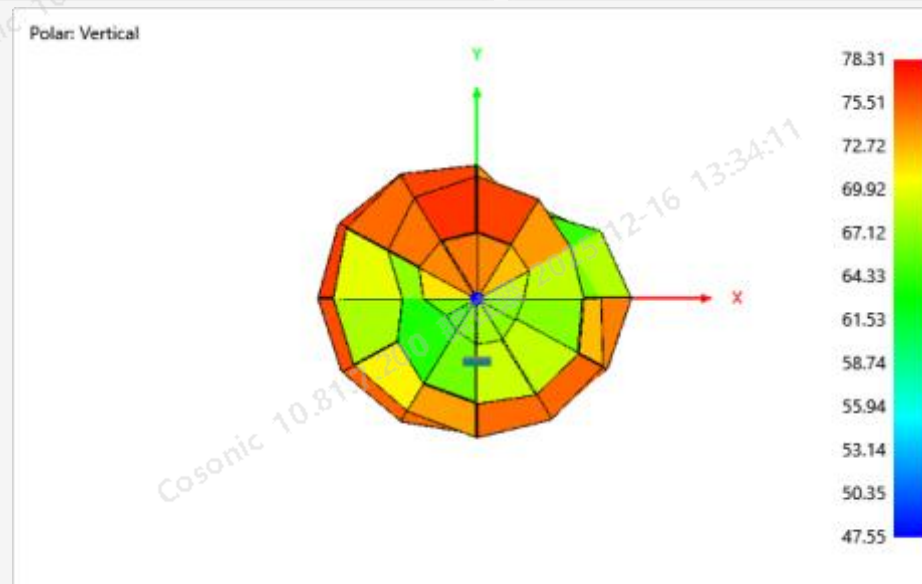
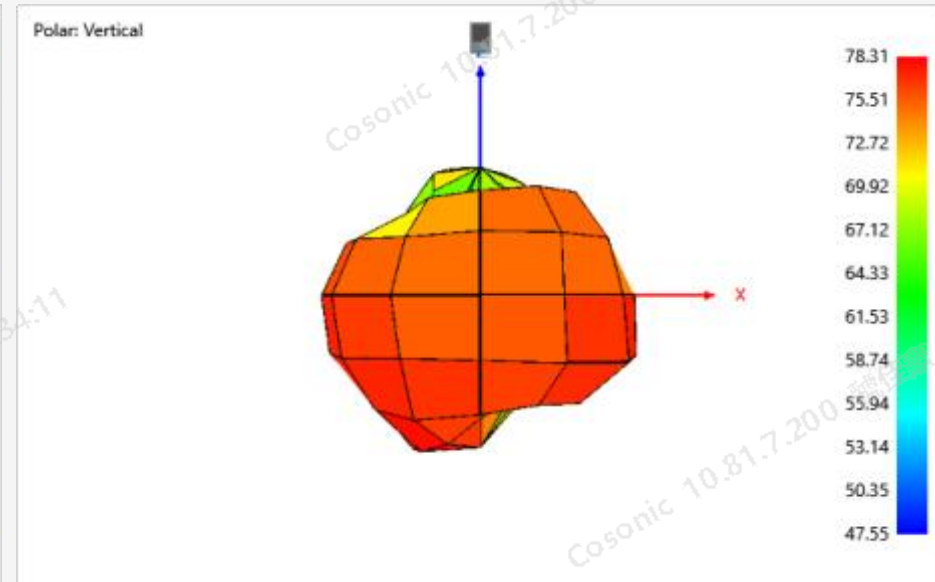
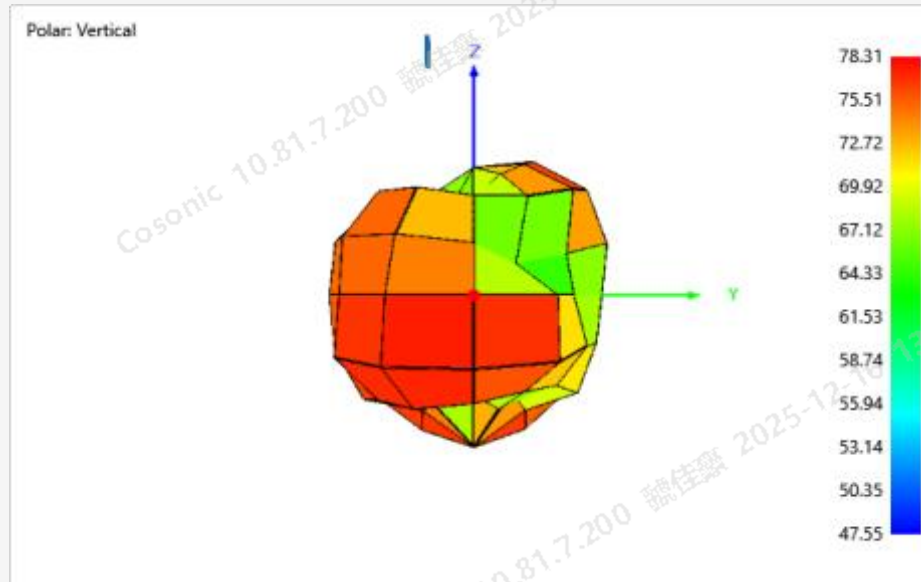
2440MHz



Active field diagram of antenna:

Hand model status

2440MHz



Thanks!!!

